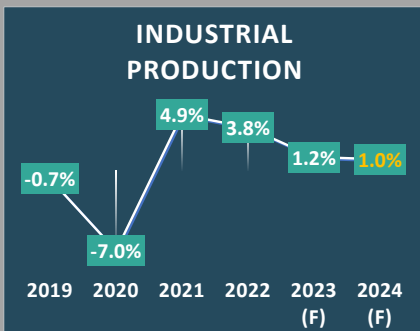
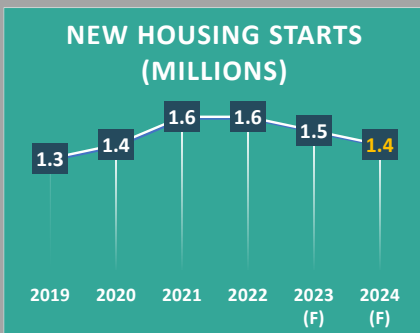
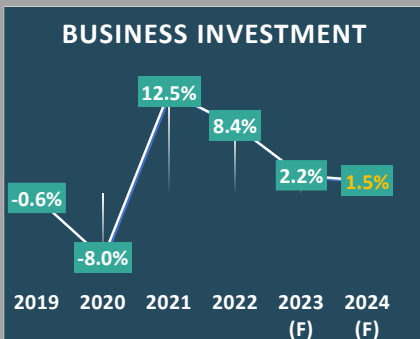
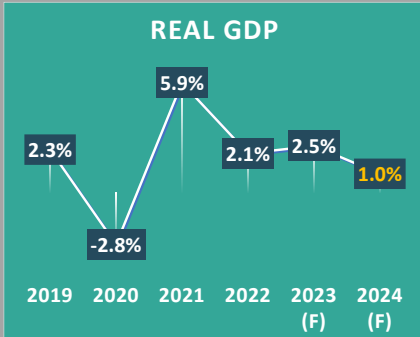


Selected Indices



Executive Summary – December '23

Big Items

GDP: Fourth quarter Real GDP likely came in somewhere between 2% and 2.5%, in line with expectations. Consumer and government spending and nonresidential construction likely led the way for growth, consistent with trends throughout 2023. Looking ahead, Real GDP is expected to provide 1.5% to 2% growth in 2024. Two camps have emerged, one that expects sluggishness in the first half of the year, and one that believes it will hold off until the second half. The key factor is employment, and if or when companies decide to trim staff.

Industrial Production: Industrial production fell rose in November by a marginal 0.2% M/M, but was down by 0.4% Y/Y. The manufacturing component of industrial production rose by 0.3% M.M but was also weaker than last year, falling by 0.8% vs. 2022. Even utilities production was facing some headwinds, the entire utility sector witnessed a drop of 1% year-over-year. But mining (oil and gas production) was the bright spot carrying the entire industrial complex, production was 2% higher year-over-year amid strong demand for US energy exports. This comes as the US continues to supply Europe with critical supplies for the winter and backfill for cuts in supplies from Russia and Ukraine.

Housing Starts: The starts data continued to improve through November (the latest available). Total starts were 9.3% higher versus November from a year ago. Slight improvements in interest rates were noticeable, and home builder confidence was rising. Surprisingly, and perhaps with some caution, single-family starts surged by 42% year-over-year. But in a reversal of trend, multi-family construction starts were down nearly 34% from last year. Data shows that more than 70% of the projects being delayed today are due to inadequate financing being available from the banking sector. That, and higher interest rates, is beginning to take a toll on new project starts in the multi-family sector.

Home Improvement Retail: The data on home improvement continued to sag a bit but it remains stronger than in the immediate post-pandemic period. Retail sales in this category are down 2.5% year-over-year (nearly \$900 million vs. November of 2022 on \$41 billion in spending). Consumers have used existing savings, and many are shifting their focus to paying down credit card debt before taking on the next home improvement project.

Manufacturing: US manufacturing activity has fallen in the latest monthly wave of data. December PMI figures from S&P Global showed the manufacturing index fell from 49.4 to 47.9, which showed that the manufacturing sector was in contraction. Twenty countries also had manufacturing sectors in contraction, which has dropped global demand for many raw materials. Mexico was still expanding, but Canada was also in deep contraction.

Big Risks

Supply Chain Congestion: Closure of commercial maritime transits through the Red Sea have stripped an estimated 20-25% of the world's freight capacity out of the global market. Freight rates are rising in some trade lanes, the question is how long this will continue. Transits around the Cape of Good Hope will add 14-21 days of additional transit and have pushed freight rates up sharply in some lanes.

What to Watch

Middle East – It goes without saying that the largest risk remains the Middle East and the risk that it poses for oil and gas supplies. Although the markets are not registering additional risk, tensions are growing and the number of countries getting involved could expand.

Macroeconomic Viewpoints

- Dr. Chris Kuehl

What Does the 2024 Economy Look Like? - There are several schools of thought as regards the 2024 economy and that is not all that helpful to the ASA member trying to determine what tactics and strategies are appropriate. One group insists the first two quarters will be facing mild recession (down by 1.0% in Q1 and maybe another .7% decline in Q2). They then expect to see more stable growth in the latter half of the year. The other scenario asserts that growth will occur in the first half (maybe around 2.0%) but then there is a slowdown in the second half. The latter assumption is what the models produced by Armada are saying. Those that assert a first half slowdown are convinced the consumer will retreat and they do not see much in the way of inventory build. The more optimistic assessment holds that consumers are still willing to spend as long as the job market remains stable. The first quarter is usually slower than the other three but with the arrival of spring the consumer gets more active. There is still a good deal of inventory building taking place and corporate investment is still at record levels. The sense is that business gets a bit more cautious towards the end of the year and that caution will be accelerated if banks are also pulling back. The game changer will be a decision by the Fed to cut interest rates by the middle of the year but that is not a sure thing.

Inflation has declined far faster than many had anticipated. The rise in inflation in 2020 and 2021 was unexpected and the sudden reversal has been equally surprising. The assertion in 2021 that inflation was "transitory" was ridiculed as the rates kept climbing but now the argument seems to hold more sway. The decline in inflation has been attributed to sharp declines in the price of energy and food. These are volatile prices and are therefore not included in estimates of core inflation but eventually changes in these factors manifest in the overall economy. Lower fuel prices will eventually mean lower freight prices. The goal of the Fed remains inflation at between 2.0% and 2.5% and right now the six-month Personal Consumption Expenditure is at 2.6% (3.2% if oil and gas are excluded). This is what has some convinced the Fed will start reducing rates by mid-year or sooner.

The primary driver for both optimism and pessimism has been the performance of the labor market. The good news is that unemployment rates are very low (still). The latest U-3 interpretation is 3.7% and when one adds the discouraged workers and involuntary part time (U-6 measure) the rates are near historic lows. It stands at 7.0% and that is as low as it has been in decades. As long as the jobless numbers are this good, the consumer will feel ok about spending and taking on debt. The bad news is that a very low rate of joblessness means a worker shortage, and this then translates into higher and higher wage demands. The prime driver for inflation now is wages as they are rising nearly twice as fast as inflation overall. The expectation is that layoffs will not accelerate much in the coming year although there will be sectors that feel the impact more than others. The financial community is seeing layoffs and so are technical fields. Long term there are increased concerns regarding what professions are most vulnerable to AI.

There are many factors that drive the economy and there is a great deal of variability between states as can be seen by marking population shifts. There has been an exodus from higher tax and higher cost of living states on the west coast and in the Northeast. The movement has been to the Southeast (especially the northern tier) as well as the Great Plains and the Southeast. The three drivers for the total economy included consumer spending (75% of the US annual GDP), government spending and commercial construction. All three of these are facing some serious headwinds in the coming year. Consumer spending was starting to show some reduction at the end of 2023 as the debt load has begun to catch up. The US consumer owes almost \$18 trillion in overall debt and \$7 trillion in credit card debt alone. This is expected to start playing a role in the coming year. The biggest impact will be in the lower third of income earners as they are already living paycheck to paycheck. Retailers have already noted that this population is spending on essentials and not on discretionary items. The flood of government money that poured out in 2020 and 2021 to address the recession was added to the billions that has been earmarked for developing alternate energy. That pandemic money is gone and there may be threats to the other funds if Congress changes hands and the GOP seeks to cut these subsidies and programs. The construction sector had a good year in 2023 but the pipeline for 2024 is not impressive. The driver last year was concentrated in the logistics arena and that remains strong but slower. The multi-family housing sector is still impressive and single family residential has made a minor comeback. Retail development is still way down, and office construction is moribund. The bottom line is that there are more unknowns than usual. Will the consumer still spend - even as they must access more credit? Will those big infrastructure projects survive a different political makeup? Will commercial projects get underway, or will they be further delayed?

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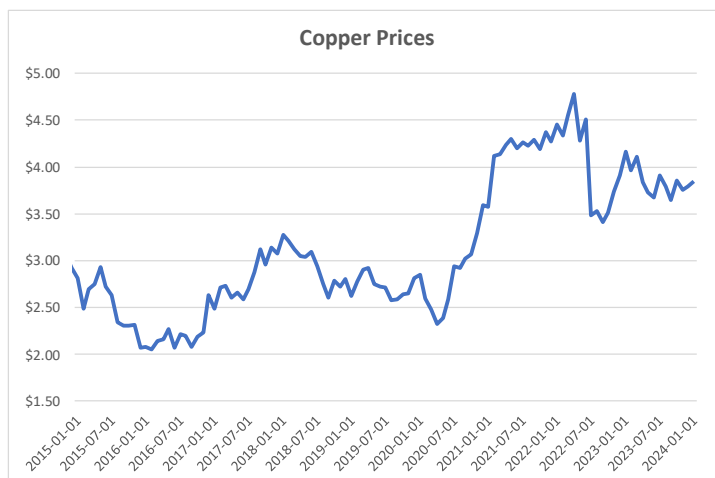
Reader Question of the Month

Q: What is the Status of US Manufacturing as the Year Starts?

A: Long term there are four key issues affecting the US manufacturer. The first has been a chronic concern for nearly two decades but has now started to reach crisis level. By the end of this decade the entire Boomer generation will have reached retirement age (76 million people). The average age of a manufacturing worker is now 58. There is no immediate solution and that leads to issue number two. Companies will have to rely on technology and robotics to a greater extent than ever before, and many will not be able to afford that kind of investment in the current banking environment. The growth of artificial intelligence in manufacturing has just started and will expand exponentially. It is estimated that almost 50% of workers today can be replaced by AI (once AI is mature). The third major issue is trade related. the US economy relies on exports for almost a quarter of its GDP and most of these exports are sophisticated manufactured goods. The US still accounts for nearly 40% of the value of global manufacturing because the US produces high value goods. The trade wars that have broken out constrain key markets. The US also depends on inputs and commodities from less developed nations. the US has been slipping into a period of isolation and protectionism which may help some companies facing foreign competition but could hurt many others that count on global business. Finally, there is constant concern around the levels of consumer demand. There is good news on the labor front and that allows consumers to spend, but by the same token they are seriously in debt, and it is only a matter of time before that debt catches up. It is the job situation that matters most. As long as consumers think their jobs are secure, they assume they can access credit and make payments. - CK

Key Commodity Outlook

The following section includes viewpoints on key commodities. Wherever possible, the Producer Price Index (PPI) is used as a gauge of prices for specific commodities. The PPI is derived from monthly Government surveys of those that purchase specific products and services. The PPI includes views on both spot and contract pricing for a given product or service and is more representative of general changes in street-level pricing trends.



Copper Prices (WPUSI019011)

- The price of copper has been fluctuating since last month and is trading at \$3.85/lb. (\$3.79/lb. last month).
- The Producer Price Index (PPI) for November (latest PPI available) was 494.178, down month-over-month by 6.9% (+1.5% last month). It was down 2.8% year-over-year (+4.1% last month). The ten-year index high was 572.0 in May 2022 and the low was 302.9 in 2016.
- **Looking Ahead:** A continued drop in global demand is the primary factor slowing down copper prices. Inventories have now also improved, at a time when 20 countries still have manufacturing sectors in contraction. That drop in global demand is keeping prices muted. For now, copper prices are essentially flat, they were just 1.9% lower YTD and are now 0.04% lower than this time last year.

General Commodities Discussion:

Nickel:

- LME Nickel Prices have slipped again over the past 30 days and were @\$7.18 per lb. (also \$7.18 in the last update). And warehouse levels increased again this month to 64,536 tons (46314 tons in the last update) but are still historically low (and well off the peak inventory level hit in 2021 of 260,000 tons).
- **Outlook:** “Raw material prices have remained exceptionally volatile and nickel prices recently fell to 16-month lows on the Shanghai Futures Exchange. But, SHFE prices have rebounded fairly sharply recently amid reports Indonesian officials will soon establish a new nickel prices index that is not tied to LME (Class One) nickel.”

Carbon Steel: (WPU101706)

- NYMEX Domestic Hot-rolled Coil steel prices ([CRU-HRCc1](#)) inched up over the past 30 days and were \$1,080 per ton in early January (\$1,028 per ton in the last update). This is still down from a peak of \$1,943 hit in August of 2021.
- Producer Prices for steel pipe and tube were slightly lower again in the latest data from the end of November (latest available). They were up 0.2% month-over-month (down 0.1% last month). Year-over-year, the PPI was 18.0% lower (-19.0% Y/Y in the last update) against much more difficult comparisons.
- **Outlook:** “Carbon steel has had a period of rising prices over the last 60 days. Hot-rolled coil increased over 15% toward the end of November but has stabilized since then. HRC futures have settled around \$1,070.00 as of 12/13/2023. We anticipate the pricing to remain level through the end of the month as manufacturers finish the year and manage inventory levels. Carbon steel pipe has remained at its newer, elevated pricing with no change predicted as of the publish date. It is worth noting, that while carbon steel pipe prices have increased, they are near where they fell in spring 2023 and still far off the highs of 2021-2022.”

Stainless Steel: (WPU10170674)

- The Producer Price Index for stainless pipe and tube were down in November (latest available). Producer prices for stainless pipe fell by 1.0% month-over-month (down 0.6% last month); and they were down 7.8% Y/Y (down 7.9% last month).
- **Outlook:** “The stainless-steel fitting market has largely stabilized over the past few months. Lead times for finished goods were somewhat extended but as they’ve returned to normal, modest pricing pressure has been observed. Raw material prices have remained exceptionally volatile.”

Ferrous Metal Scrap: (PPI: PCU4299304299301)

- Producer prices for ferrous metal scrap increased in October vs. the prior month, coming in with an index of 492.8 (462.7 last month). This was higher by 6.1% M/M (-3.4% last month). Year-over-year it was up by 14.6% Y/Y (+4.0% in the last update). The highest producer price prior to this was in July of 2008 when the index hit 731.4 points.
Outlook: The primary sources for ferrous metal scrap (nationally) are end-of-life vehicles, construction and demolition, consumer durables (appliances, furniture, stoves, refrigerators, etc.), manufacturing excess scrap, and infrastructure recycling. Many of those activities are still not producing as much volume as expected, and slowdowns in economic activity lead to a reduction in manufacturing scrap. In addition, with vehicle prices being higher, hanging onto older vehicles becomes more important. One factor that will eventually start to impact the global scrap market is the recycling of construction materials in war zones. Once that starts to hit the global market, scrap prices are likely to adjust.

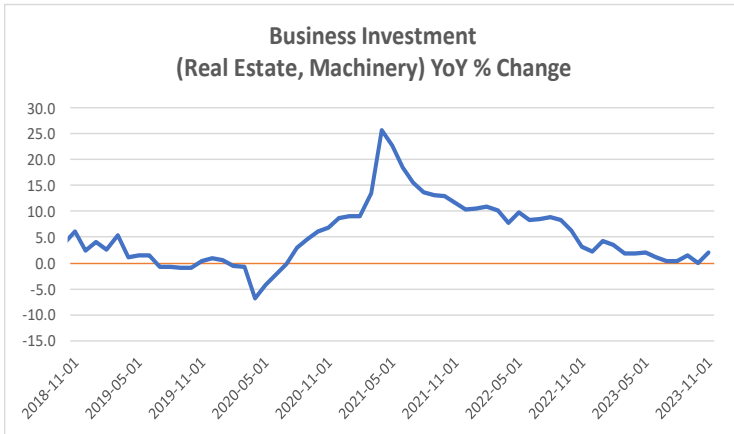
Additional commodities and finished product pricing are addressed in the Producer Price Index review on the next page.

Producer Price Index – Key Industry Products

The Producer Price Index (PPI) for key supply industry metrics is listed in the chart below including month-over-month and year-over-year comparisons. To the degree that the PPI is derived from monthly Government Surveys of actual purchasers and users of the following products, it provides a more accurate street-level pricing viewpoint. Some data is delayed and may not have been updated by the time of publication.

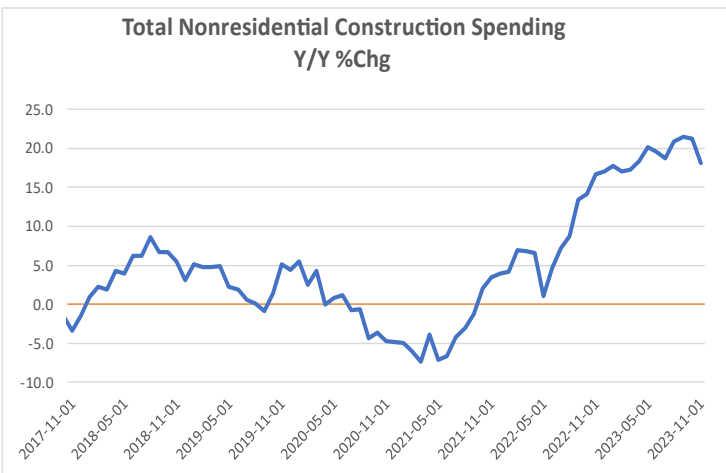
Producer Price Index - Key Industry Products						
Category	PPI Code	Nov-23	Oct-23	M/M% Chg	Nov-22	Y/Y % Chg
Pipe, Valves and Fittings						
Metal valves, except fluid power	WPU114902	442.1	442.1	0.0%	423.4	4.4%
Gates, globes, angles and check valves	WPU114902011	165.8	165.8	0.0%	159.6	3.9%
Ball valves	WPU11490202	590.0	590.0	0.0%	558.3	5.7%
Butterfly valves (formerly W2421490203)	WPU11490203	306.1	306.1	0.0%	292.0	4.8%
Industrial plug valves	WPU11490204	308.7	308.7	0.0%	297.7	3.7%
Plumbing and heating valves (low pressure)	WPU11490205	389.8	389.8	0.0%	376.4	3.6%
Solenoid valves	WPU11490208	372.2	372.2	0.0%	372.2	0.0%
Other industrial valves, including nuclear	WPU11490209	414.6	414.6	0.0%	392.4	5.7%
Automatic valves	WPU11490211	260.9	260.9	0.0%	248.9	4.8%
Metal pipe fittings, flanges and unions	WPU11490301	477.1	477.1	0.0%	476.0	0.2%
Steel pipe and tube	WPU101706	384.0	383.1	0.2%	468.4	-18.0%
Steel pipe and tube, alloy	WPU10170673	109.5	109.5	0.0%	109.5	0.0%
Steel pipe and tube, stainless	WPU10170674	141.5	142.9	-1.0%	153.5	-7.8%
Copper & copper-base alloy pipe and tube	WPU10250239	329.1	330.9	-0.5%	357.0	-7.8%
Plastic pipe	WPU07210603	189.5	192.8	-1.7%	215.1	-11.9%
Plastic pipe fittings and unions	WPU07210604	314.1	315.5	-0.5%	325.1	-3.4%
Plumbing Fixtures, Fittings and Trim	WPU105402	395.0	395.0	0.0%	388.5	1.7%
Bath and shower fittings	WPU10540211	286.7	286.7	0.0%	286.7	0.0%
Lavatory and sink fittings	WPU10540218	204.6	204.6	0.0%	197.3	3.7%
Enameled iron and metal sanitary ware	WPU1056	290.6	281.6	3.2%	288.3	0.8%
Steam and Hot Water Equipment	WPU1061	428.5	428.5	0.0%	207.7	106.3%
Cast iron heating boilers, radiators and convectors	WPU10610106	289.7	289.7	0.0%	279.2	3.8%
Domestic water heaters	WPU106601	570.6	570.6	0.0%	569.4	0.2%
Electric water heaters	WPU10660101	564.3	564.3	0.0%	569.4	-0.9%
Non-electric water heaters	WPU10660114	347.7	347.7	0.0%	346.7	0.3%
Warehousing, Storage and Related Services	WPU321	136.8	137.7	-0.6%	131.8	3.8%

PHCP & PVF



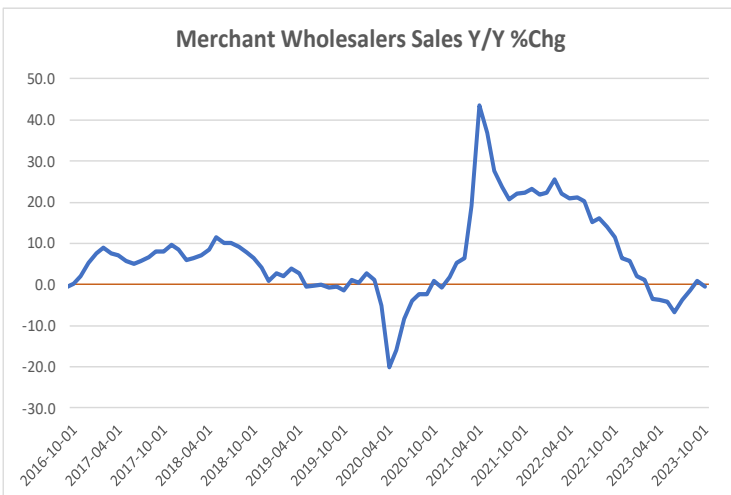
Capital Goods New Orders (NEWORDER)

- The value of manufacturers' new orders for capital goods went up 2.0% in November M/M (-1.5% last month). They remained up by 2.0% Y/Y (up 0% last month) and continued to be stable overall.
- **Outlook:** Capital spending took another shot upward in November, despite concerns that there could be a slowing of spending in the first half of 2024. Total dollars of spending remain near a record high of \$75 billion annually (mostly on capital goods and technology) to improve and automate operations. Despite significant interest rate hikes, corporations are allocating a larger percentage of cash to improve operations and lower costs. That will increase spending for automation technologies and raw materials that go into them (aluminum, copper, lead, etc.).



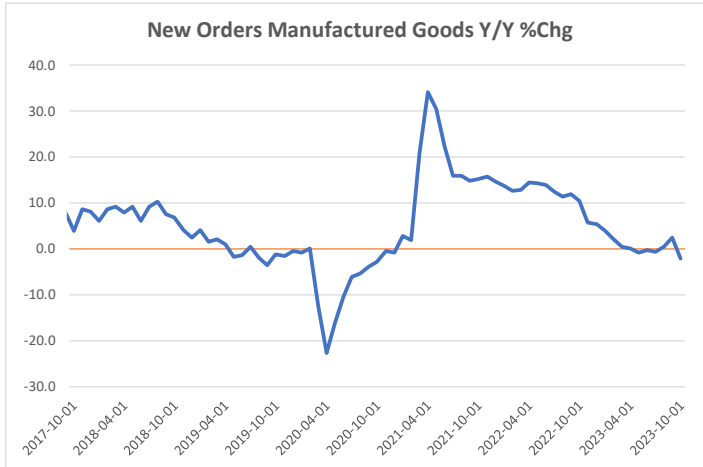
Total Non-Residential Construction (TLNRECONS)

- Total Non-Residential Construction activity in November (latest available) was 18.1% higher than it was a year ago (21.3% higher last month) and was 3.2% lower M/M (down 0.2% in the last report). Overall spending was at a new all-time high of \$1.131T (the prior annualized run rate peak of \$900B was in September of 2022).
- **Outlook:** Nonresidential construction is one of three legs of a stool that is currently keeping GDP positive. Funding mechanisms in place should continue to keep it stable in 2024. Leading the non-residential construction sector in growth is still the manufacturing construction sector, which is still 59.1% higher Y/Y on nearly \$209 billion in spending.



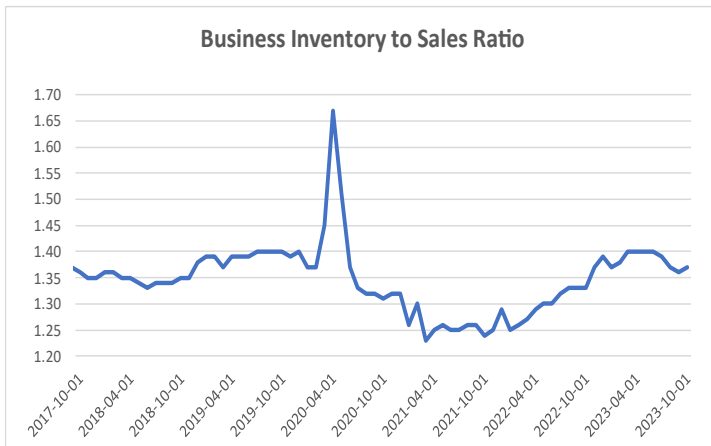
Wholesale Trade (WHLRLSMSA, WHLSLRMSA)

- Merchant wholesalers' sales were down 0.4% Y/Y through October (latest available; up 0.8% Y/Y in the last update). Month-over-month, sales were decreasing by 1.2% (+2.3% last month).
- Wholesale inventories were down 2.3% year-over-year in October (latest available; down 1.3% last month).
- **Outlook:** Again, it appears as though inventories are getting rebalanced on a global level. This is important because the global economy has been wrestling with inventory overstocks. This has kept the upstream portion of the supply chain shut off (inputs of raw materials, energy, labor, etc.) into the manufacturing process. Now, with inventories balanced, new orders create demand far upstream for those elements, and will help restart the global supply chain.



Manufacturing (AMTMNO)

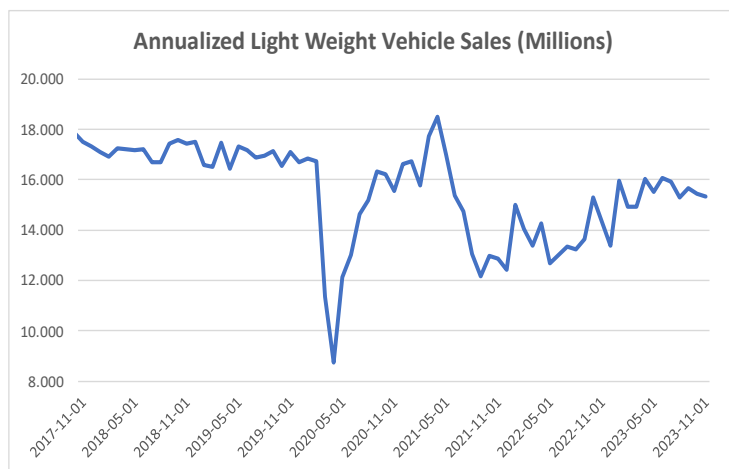
- Federal data on manufacturing was down 2.1% Y/Y (+2.5% last month) through October (latest available). It was also down sequentially by 4.6% month-over-month (+2.1% last month).
- The S&P Global US manufacturing PMI came in at 47.9 in December, down from 49.4 in November.
- **Outlook:** Global data from the Purchasing Manager’s Indexes showed 20 countries had manufacturing sectors remaining in contraction through December. Reversing the November trends, companies reported that new orders decelerated in December and layoffs of workers in many countries resumed. The backlogs of orders are gone, and inventories are largely rebalanced as mentioned prior.



Business Inventory to Sales Ratio (ISRATIO)

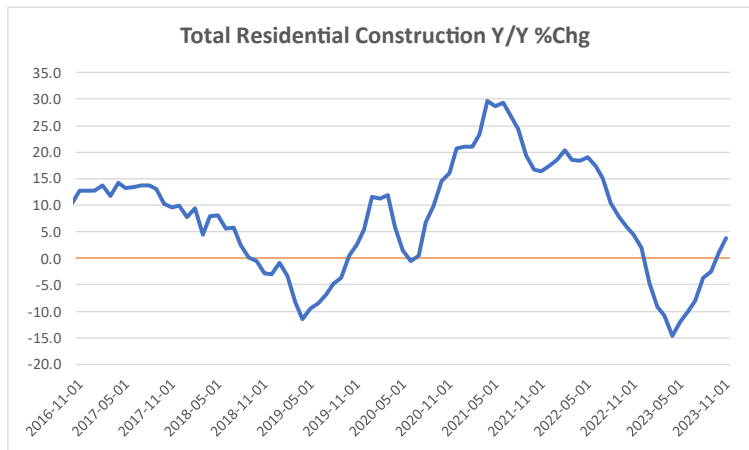
- The current inventory to sales ratio for all businesses is at 1.37 months of inventory on hand in October (latest available; 1.36 last month). Relative to sales, inventories are low, this month’s ratio was 0.7% higher Y/Y (0.7% lower last month).
- **Outlook:** Approximately 64% of the goods producing and moving industry are still facing inventory levels that are between 3% and 25% higher than they were in the entire decade prior to the pandemic (when supply chains were in-cycle). But once again this month, survey anecdotes are suggesting that inventories across the board are getting more balanced, and that could help reset the global supply chain. The inventory data lags by a full month, and we believe that when new data is available covering Q1, that inventories will be balanced.

PHCP



Auto Sales (ALTSALES; AISRSA)

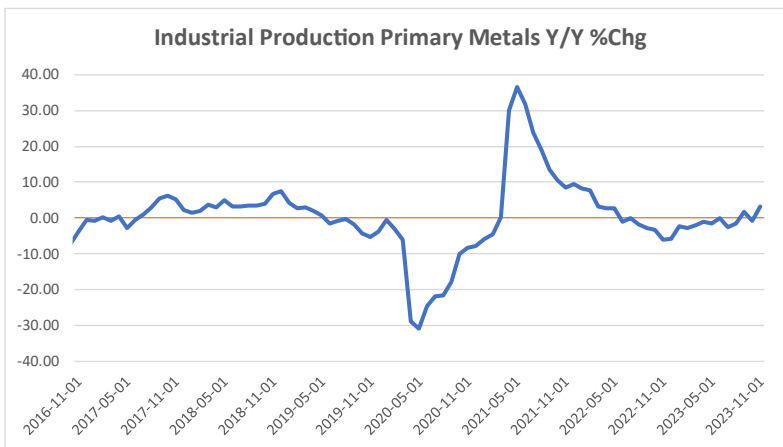
- US auto sales were trending at a 15.319-million-unit annual rate (15.446M last month) through November (latest available). This is up 7.3% year-over-year (+5.2% in the last update).
- The domestic auto inventory to sales ratio was up 112.3% Y/Y in November (latest available). On a monthly basis, it was up 24.6% (up 26.9% last month).
- **Outlook:** In the post-strike era, supply chains are still working to get back to full operation. But it is noted that auto inventories are beginning to rise. Auto dealers are concerned that OEMs could overstock them at some point in early 2024, leading to a drop in further orders (creating a weaker second half of 2024 for new orders). That is not yet the case, but as production continues at full pace and sales are becoming sluggish, it could become a factor in the months ahead if these trends continue.



Total Residential Construction (PRESCONS)

- Total residential construction in November (latest available), was up by 3.7% Y/Y (up 1.1% last month). It was up 2.6% M/M (+3.6% last month).
- **Outlook:** Interestingly, residential construction is increasing at a time when multi-family is starting to see a reduction in activity. Builders have found a sweet spot in their local markets where buyers are willing to jump into new homes (affordability being the biggest factor), and they are building at a faster rate knowing that buyers will jump in the market. However, some estimates suggest that multi-family inventories are rising faster than demand for non-subsidized housing. Rental vacancy rates have increased to their highest levels since 2021 and rents are coming down as a result (part of the disinflation story).

PVF



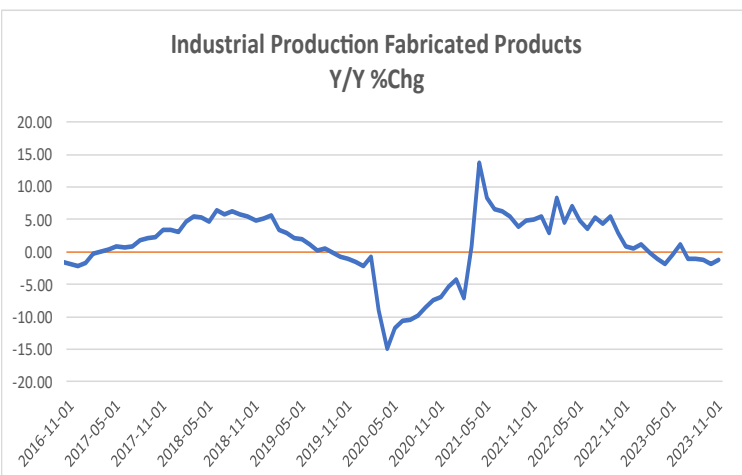
Industrial Production Primary Metals (IPG331S)

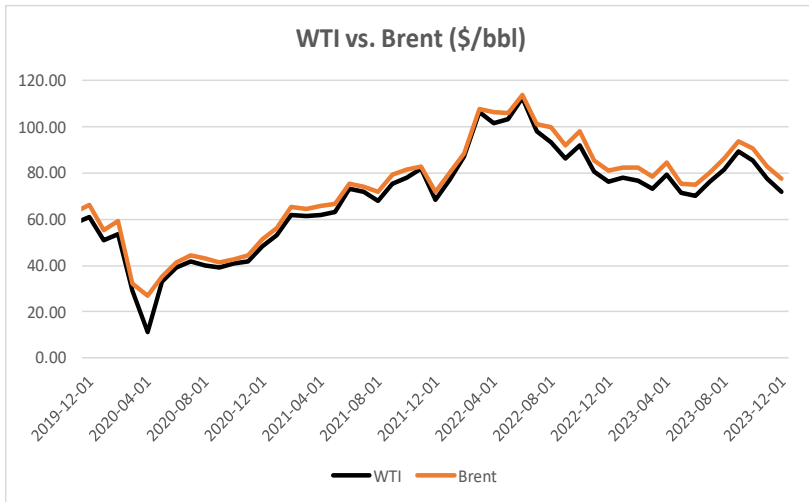
- Industrial production for primary metals was up 3.3% Y/Y through November (down 0.7% in the last update). It was up 4.09% M/M (down 2.3% M/M in the last update).
- **Outlook:** As mentioned, there are five primary sectors in industrial production that are driving demand, which is creating enough activity to keep the sector essentially stable year-over-year. Multiple tranches of government spending will hit in 2024 which should keep the industry stable. Defense spending is increasing with nearly \$28 billion in additional incremental spending, the CHIPS Act is still building momentum, the Infrastructure Reduction Act allocations will start in 2024, and continuation of the Infrastructure Bill spending will still throw roughly \$50 billion in additional spending into the market.

Industrial Production Fabricated

Metals (IPG332S)

- Fabricated metal industrial production was down 1.3% Y/Y through November (down 1.9% last month). It was up 0.6% on a month-over-month basis, (down 0.6% in the last update).
- **Outlook:** Fabricated metal production is a key feeder into other sectors of manufacturing and activity through November was still trailing slightly behind last year's volumes. Some sluggishness in consumer goods sectors and a slow resumption of automotive output was still hampering the sector. General demand will follow manufacturing, and the manufacturing sector is in a slowdown period at the moment.





WTI and Brent

- WTI is currently at \$71.90 a barrel (\$77.69 last month) and Brent is at \$77.63 (\$82.94 last month).
- **Outlook:** There are some new insights on what the future of the petroleum sector could look like in a world full of turmoil. In the past, even a small news event could lead to a spike in oil prices. But in 2023, there was no shortage of supply-concerning events in the Middle East. In other cycles, it would have likely pushed prices above \$100 a barrel. But there is recognition now that the industry may be approaching a period in which oil supply is more dynamic and production flexibility allows output to be quickly ratcheted up (to a degree) to offset any cuts in global supply. Global demand is expected to rise between 1.3 million barrels a day to 2.2 million barrels per day. This can likely be absorbed by current production, barring any real, material cuts in supply coming from Guyana, Iran, Libya, or other current hotspots.

<https://bakerhughesrigcount.gcs-web.com/rig-count-overview>

	Last Count	Count	Change from Prior Count	Change from Last Year
U.S.	5-Jan-24	621	-1	-151
Canada	5-Jan-24	125	39	-64
International	Dec-23	955	-23	55

Rotary Rig Counts (Baker Hughes)

- Baker Hughes US active rig counts were down 151 Y/Y (-159 in the last update) at 621 (1,049 in 2019); Canadian counts were down by 64 Y/Y (down 3 in the last update). International counts are up by 55 Y/Y (+68 in the last update).
- **Outlook:** The US touched new records of output above 13.1 million barrels per day, on fewer active wells. There are also many wells that are still in pre-production phases, the infrastructure is in place and production is not yet put into motion awaiting stronger market fundamentals to start production. The EIA shows the balance between global oil supply and demand to remain balanced through 2024, assuming the production of oil continues to grow at current rates. None of these forecasts at this time incorporate any disruptions in supply (whether physical or geopolitical through sanctions).

Construction Outlook

Residential construction: 30-year national average mortgage rates were falling in early January, at 6.62% (7.22% in the last update). Home builder confidence rose M/M in December by 8.8% according to the [NAHB/Wells Fargo index](#), it jumped to 37 points (up from the November reading of 34). The all-time high was 90 points in November of 2020. Builders' confidence inched up slightly in the latest measures as it looks like the Federal Reserve will end this interest rate hike cycle. Uncertainties still abound concerning how fast cuts in rates will take place, but the drop in the 30-year mortgage rate is a welcome sign by most builders.

NAHB/Wells Fargo National and Regional Housing Market Index (HMI)										
NATIONAL										
(Seasonally Adjusted)	2022	2023								
	Dec.	Jan.	Jul	Aug	Sep.	Oct.	Nov. Revised	Dec. Prelim.	M/M	Y/Y
Housing Market Index	31	35	56	50	44	40	34	37	8.8%	19.4%
Housing Market Index Components										
Single Family Sales: Present	36	40	62	57	50	46	40	40	0.0%	11.1%
Single Family Sales: Next 6 Months	35	37	59	55	49	44	39	45	15.4%	28.6%
Traffic of Prospective Buyers	20	23	40	35	30	26	21	24	14.3%	20.0%
REGIONAL HMI										
(Seasonally Adjusted)	2022	2023								
	Dec.	Jan.	Jul	Aug	Sep.	Oct.	Nov. Revised	Dec. Prelim.	M/M	Y/Y
Northeast	32	34	60	55	48	46	53	55	3.8%	71.9%
Midwest	30	32	46	42	38	37	31	35	12.9%	16.7%
South	35	39	58	55	48	43	35	39	11.4%	11.4%
West	25	29	54	46	42	36	28	28	0.0%	12.0%

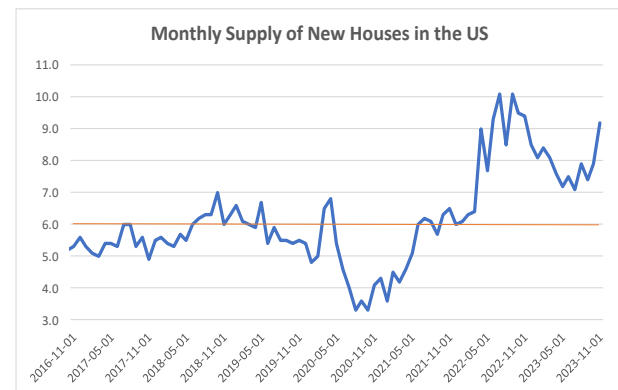
On a year-over-year basis, the NAHB/Wells Fargo Housing Market Index was up 19.4% against December of 2022 (up 3.0% last month).

Adjusted housing inventories increased in November (latest available), coming in at 9.2 months of inventory on hand. This is much higher than the “ideal range” of 6 months of inventory on hand and is just slightly lower than the 9.5 month peak we saw last October. The increase in inventory could be a worrisome sign.

The housing market is highly regionalized, and each region has different levels of housing activity, but macro demand is still being tempered by lack of affordable single-family housing inventories and steep housing prices which are only easing in some markets. But new permit and starts data is weak.

New housing starts are volatile right now and came in at a 1.560-million-unit rate on an annualized basis (higher than last months adjusted 1.372 million annual rate); and the outlook for the rest of 2023 is mixed.

Single family starts were sharply higher in November by 18.0% M/M (latest available) and were up 42.2% Y/Y. Multi-family starts are volatile and were up 8.9% M/M but were down 33.7% Y/Y.



National Outlook: The Federal Reserve has likely hit its peak in the rate hike cycle. Lower interest rates in the second half of 2024 are possible. Fed officials on average believe that 2024 will bring at least 2 quarter-point cuts in interest rates. Surveys also continue to show that lack of access to financial funding is the primary hindrance to many non-residential projects' starts (roughly 62% of project start delays are now due to funding difficulties). That has superseded the lack of availability of labor and products used in construction activity. Banking records also show the lowest volume of bank credit being extended since the Great Recession, a sign of tighter credit conditions.

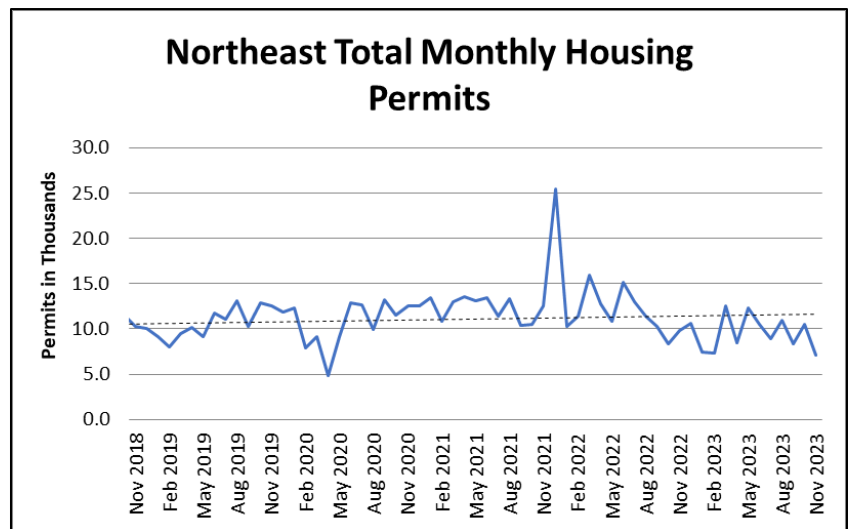
NAHB Housing and Interest Rate Forecast, 12/12/2023							
	2019	2020	2021	2022	2023	2024	2025
Housing Activity (000)							
Total Housing Starts	1,292	1,397	1,606	1,551	1,394	1,336	1,414
Single Family	889	1,003	1,132	1,004	927	958	1,027
Multifamily	403	394	474	547	468	379	388
New Single Family Sales	685	833	769	637	673	719	792
Existing Single-Family Home S	4,746	5,057	5,420	4,530	3,691	3,784	4,229
Interest Rates							
Federal Funds Rate	2.16%	0.36%	0.08%	1.68%	5.03%	5.13%	3.81%
Fixed Rate Mortgages	3.94%	3.11%	2.96%	5.34%	6.83%	6.77%	5.79%
Prime Rate	5.28%	3.54%	3.25%	4.85%	9.26%	11.91%	9.60%

[For more forecast details, visit www.nahb.org.](http://www.nahb.org)

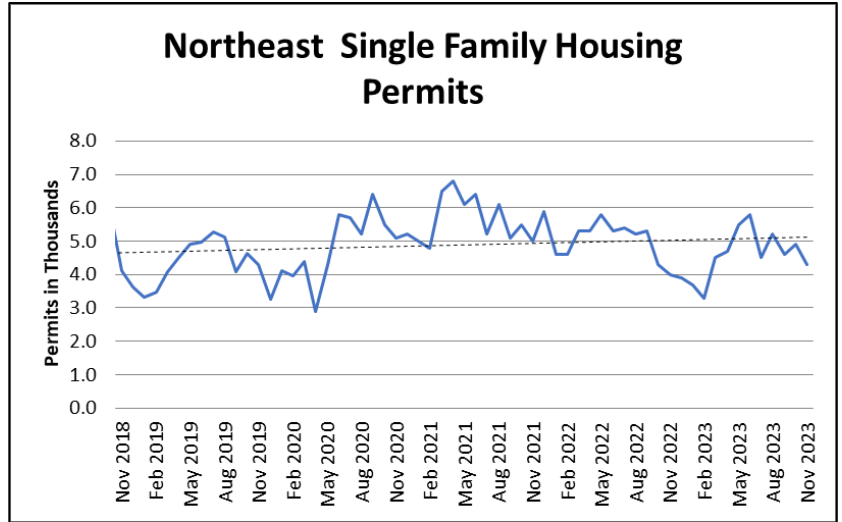
The following section provides monthly housing permit data for each major region in total, single family, and multi-family units.

Regional market outlook: Northeast

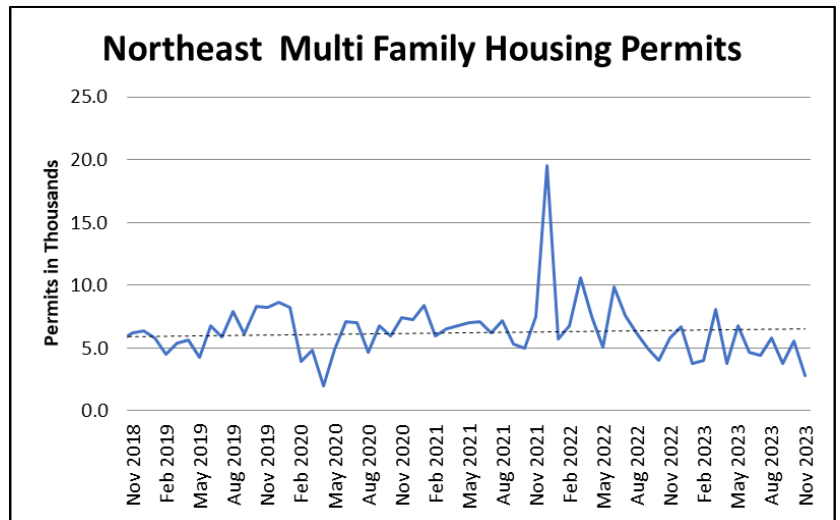
- Northeast total housing units authorized for construction were down in November by 32.4% M/M (+25.0% last month). November was the latest regional data available throughout this series.
- The 3-month moving monthly average was down 10.3% (+8.3% last month).
- On a year-over-year basis, permits were down 27.6% (+26.5% in the last update).



- Month-over-month single family permits were down 12.2% (+6.5% last month).
- On a 3-month moving average basis, permits were down 5.8% (+3.5% last month).
- Year-over-year permits were up 7.5% (+14.0% last month).

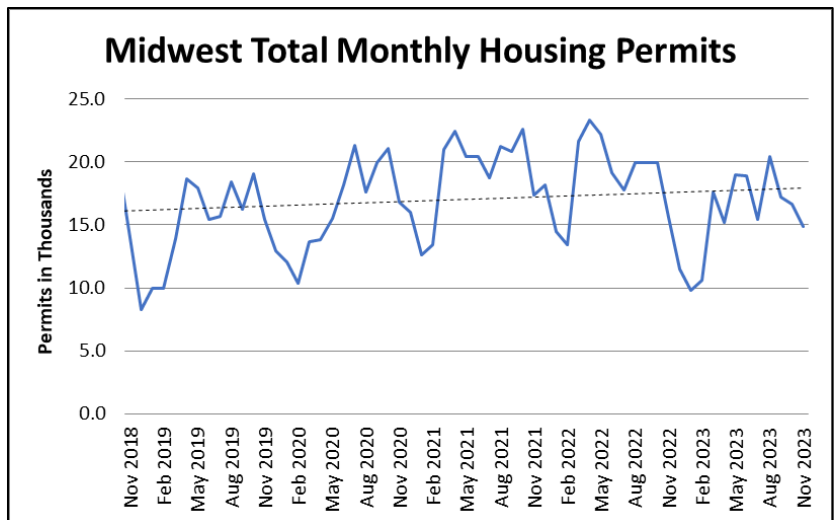


- Multi-family housing permits authorized for construction were down 50.0% M/M (+47.7% in the last update).
- They were down 12.4% on a rolling 3-month average (+14.9% last month).
- On a year-over-year basis, they were down 51.7% (+40.0% in the last update).
- These figures are based on a small number of units so the percentages can seem higher and more volatile.

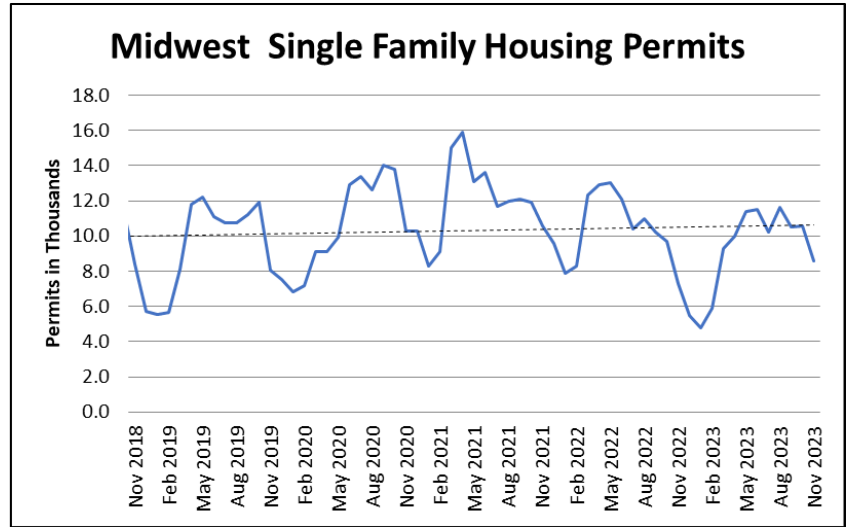


Regional market outlook: Midwest

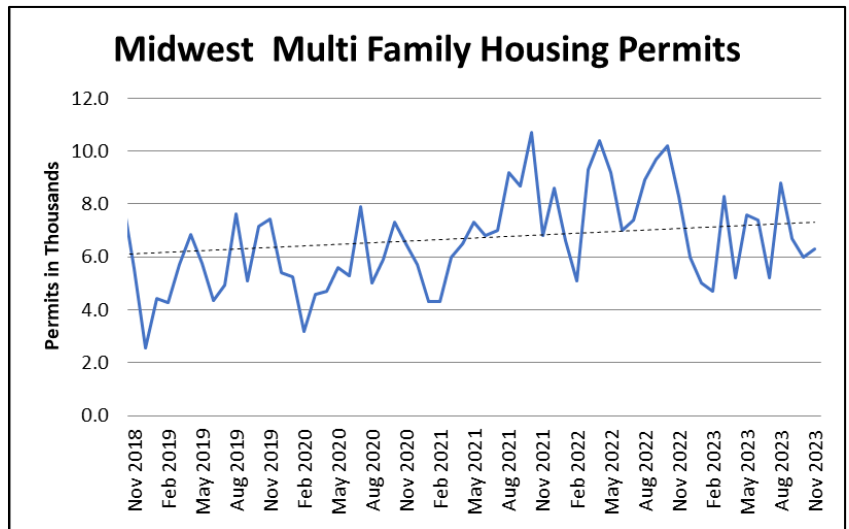
- Midwest total housing permits were down 10.2% month-over-month (-3.5% in the last update).
- The 3-month average was down 9.8% (+4.4% in the last update).
- On a year-over-year basis, permits were down 4.5% (-16.6% in the last update).



- M/M permit volumes were down 18.9% (+1.0% last month).
- The 3-month rolling average shows that permits were down 9.1% (+1.7% in the last update).
- Year-over-year, single family homes authorized by permits were up 17.8% (+9.3% in the last update).

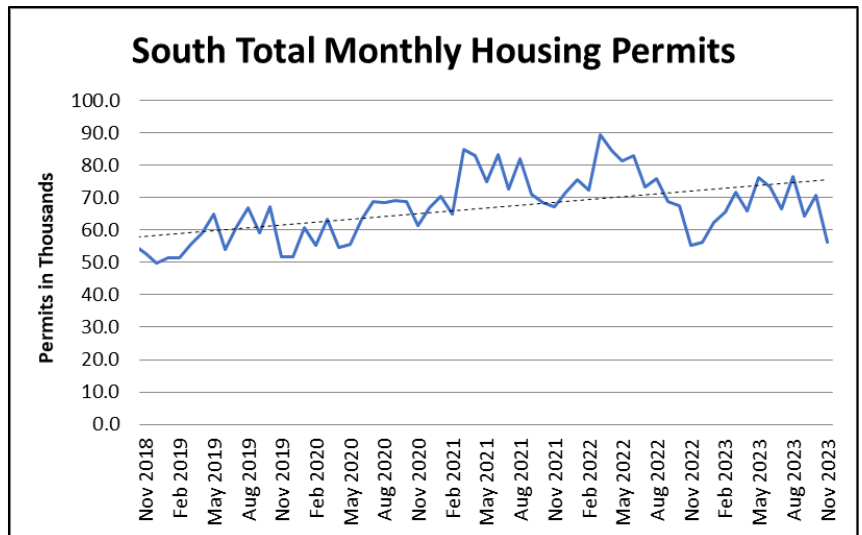


- Multi-family housing permits, again, are volatile month-over-month. This month, they were up 5.0% (-10.4% last month).
- On a 3-month rolling average basis, they were down 9.8% (+11.6% in the last update).
- On a year-over-year basis, permits were down 24.1% (-41.2% in the last update).

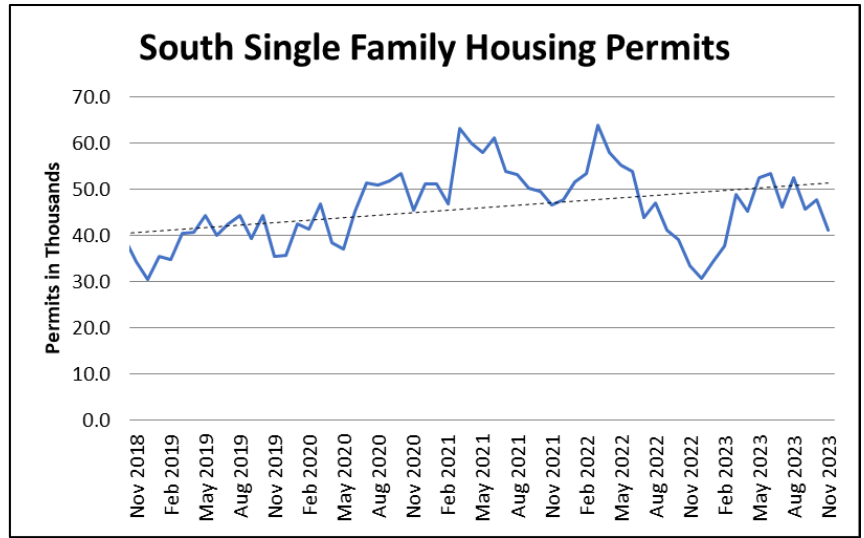


Regional market outlook: South

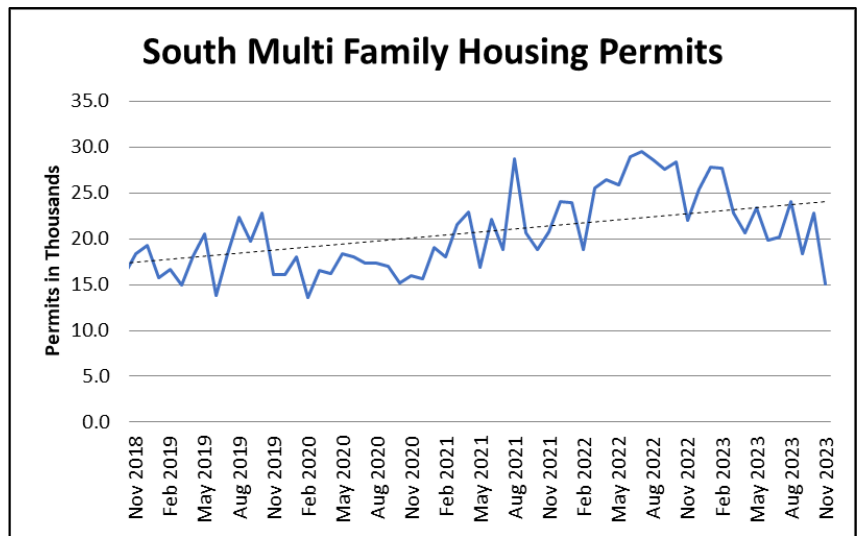
- Southern region housing permits were down 20.4% month-over-month (+10.1% in the last update).
- On a 3-month rolling average basis, permits were down 8.8% (+3.0% in the last update).
- On a year-over-year basis, total permits were up 1.4% (+4.4% in the last update).



- Southern region single family home permits were down 14.0% M/M (+4.6% last month).
- On a 3-month rolling average, they were down 7.5% (+1.7% in the last update).
- On a year-over-year basis, single family permits were up 23.1% (+21.9% in the last update).

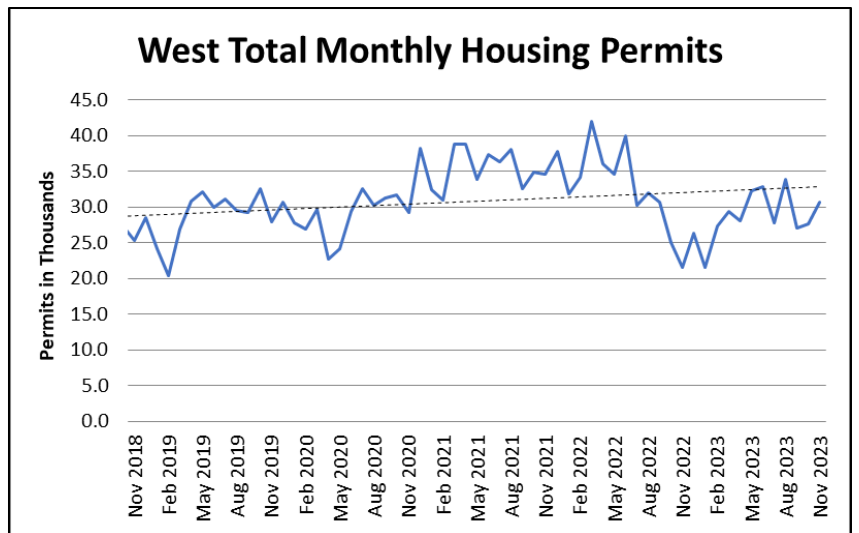


- Southern multi-family permits were down 33.8% M/M (+23.9% last month).
- On a 3-month rolling average basis, permits were down 11.1% (+6.5% last month).
- On a year-over-year basis, permits for multi-family housing were down 31.4% (-19.7% in the last update).

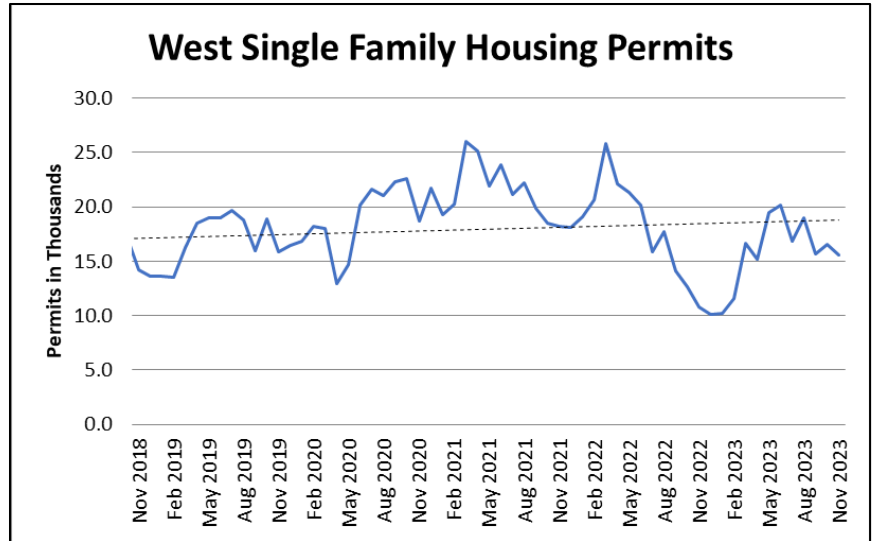


Regional market outlook: West

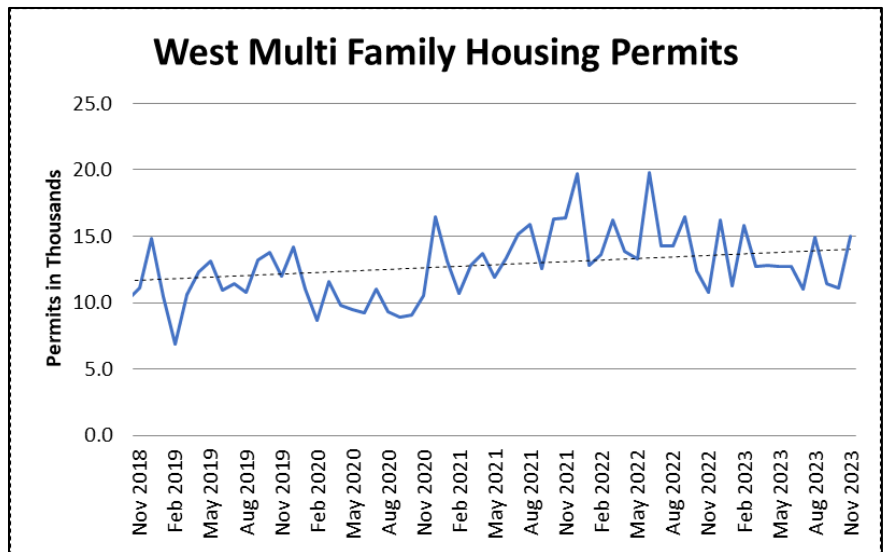
- Western region total monthly housing permits were up 10.9% M/M (+1.8% last month).
- On a 3-month rolling average basis, they were down 2.4% (+1.2% last month).
- On a year-over-year basis, permits were up 41.7% Y/Y (+10.4% in the last update).



- Single-family permits were down 5.5% M/M (+5.1% last month).
- On a 3-month moving average basis, permits were down 5.9% (+0.3% in the last update).
- Year-over-year, single family permits were up 44.4% (+31.0% in the last update).



- Multi-family permits were up 35.1% M/M (-2.6% in the last update).
- On a 3-month rolling average, it was up 3.0% (+3.1% in the last update).
- Year-over-year, multi-family unit permits were up 38.9% (-10.5% last month).



Industry Outlook

ASA Sales were essentially flat, rising by 0.1% Y/Y (+3.4% last month) in November (latest available). Year-to-date through November, sales were up 3.5% (+4.1% in the last update). For the trailing twelve months prior, sales were up 4.1% (4.9% in the last update). ASA Pulse Report findings are reported monthly. The following chart shows the breakdown by primary business type and region.

	November Y/Y % Change in Total Dollar Sales	YTD % Change vs. YTD 2022	Trailing Twelve Months % Change
All Businesses	0.1%	3.5%	4.1%
By Primary Business			
PHCP	2.2%	3.4%	3.3%
PVF	-5.6%	4.4%	7.8%
PHCP & PVF	1.7%	3.6%	3.7%
By Region			
1 (SWPD & WSA)	-5.9%	-0.1%	6.5%
2 (ASA Central)	0.2%	6.6%	4.4%
3 (SWCD)	5.9%	5.3%	5.3%
4 (NCWA)	3.0%	3.4%	3.5%
5 (ASA Northeast)	0.8%	3.4%	3.8%
6 (SWA)	-0.2%	5.6%	4.7%
*ISD - Insufficient Data			

The US Transportation Services Freight Index (TSIFRGHT), which typically leads ASA Sales by about five months, was delayed this month with the new release. The last report available was still from September and it showed that the TSI was at 138.6 for freight, unchanged M/M but was down by 1.8% Y/Y (down 1.9% Y/Y last month).

More recent data (comparing similar industry data to the TSI) from other sources show much weaker data. DAT Trendlines was reporting at the end of December (latest available) that spot truck freight demand was **57.2% lower than it was a year ago**. Spot trucking rates have fallen 12.4% Y/Y, and now fuel surcharges are down -15.4% Y/Y.

Forecast data still shows that oil production in the US may have exceeded the 13 million barrels per day levels, ahead of expectations. Total oil inventories are still low on the 5-year average range, and the Strategic Petroleum Reserves are still at the lowest levels since the mid 1980's and rebuilding activity is slow. This means that production will continue to be stable in the near term.

Uncertainties around the world with oil distribution (not necessarily production and output) increased in late December as Red Sea distribution was interrupted by attacks in the region. The Suez Canal is responsible for carrying 10% of global crude oil and 14% of all petroleum flows. Estimates suggest that approximately 20-25% of the global supply of maritime tanker capacity may have been cut because of the longer transit times required to go around the Cape of Good Hope in Africa to hit destinations in Europe and elsewhere. However, at the time of writing, this had not yet impacted the global price for crude oil nor shown up in global supply estimates. In essence, it puts "more oil on water" in bulk tankers and eventually, inventories will catch up as order cycle times adjust to the additional 21 days of transit time required.

Retail sales remained stable in November overall and were mixed across many categories of retail month-over-month. Total retail sales were 0.3% higher month-over-month and were 4.1% higher year-over-year.

When adjusted for inflation, sales were slightly higher month-over-month in November by 0.2% and were slightly higher by 0.9% compared to last year at this time (they were lower by 1.0% year-over-year last month).

Home improvement retail sales volumes were still sluggish in November, falling by 0.4% M/M and they remained marginally lower by 2.5% against last year. Again, when adjusted for inflation, sales were even lower year-over-year.

Economic growth is still outpacing expectations with current growth of 2.5% showing for Q4, ahead of expectations for growth of 1%-1.5%. Looking forward, the risks for economic growth will still come in Q1 and Q2 as consumer spending softens. Consumer spending expectations are still muted, and savings levels were retreating at the end of the year. The US savings rate is worse than in Japan, across the EU, and UK.

Kind of Business	Percent Change Nov. 2023 Advance from --	
	Oct. 2023	Nov. 2022
Retail & food services,		
total	0.3	4.1
Retail	0.1	3.1
Motor vehicle & parts dealers	0.5	6.1
Furniture & home furn. stores	0.9	-7.3
Electronics & appliance stores	-1.1	12.0
Building material & garden eq. & supplies dealers	-0.4	-2.5
Food & beverage stores	0.2	0.4
Grocery stores	0.1	0.1
Health & personal care stores	0.9	10.9
Gasoline stations	-2.9	-9.4
Clothing & clothing accessories stores	0.6	1.3
Sporting goods, hobby, musical instrument, & book stores	1.3	0.2
General merchandise stores	-0.2	1.1
Department stores	-2.5	-5.2
Nonstore retailers	1.0	10.6
Food services & drinking places	1.6	11.3

Non-residential construction is expected to keep its current momentum in 2024 with total spending near \$1.2 trillion, which will continue to keep the supply industry chasing opportunities. Job openings in the construction sector have surged over the past 60 days and government investment from the Infrastructure Bill, CHIPs Act, and Inflation Reduction Act will likely boost spending on construction activities in 2024.

Again, current estimates from the Fed suggest that some rate cuts could start as early as the end of Q2 of 2024, but those rate cuts are likely to be mild for the full year (perhaps two quarter point cuts). The Fed has set a longer term rate target of 2.5% to 3%, but that can change.